ſome ingenious Anatomiſt were appointed for this ſervice, when it ſhall happen; for this caſe, if rightly enquired into, may be of uſe and ſatisfaction to the curious.

V. *A Letter from Dr* William Muſgrave, *F. R. S. to the Publiſher, concerning ſome Experiments made for tranſmitting a Blue coloured Liquor into the Lacteals.*

Exon, Sept. 24. 1701.

SIR,

THE *new Theory of Continual Fevers*, lately publiſht, ſpeaking (page 54, 55,) of that conſiderable experiment of Dr *Liſter's*, made for colouring the Lacteals; and Printed, Phil. Tranſ. N. 143; as if the Dr *could never get the experiment done to his ſatisfaction*; and intimating, *That People may be deceived with Blue Tinctures; for* [*that*] *this is the natural colour of theſe Lacteals, when they are almoſt, or altogether empty.* I have drawn out of my *Adverſaria* the ſumm of what was, a little after that Tranſaction came out, done by me, in this matter.

Feb. 168$\frac{3}{4}$ I injected into the *Jejunum* of a Dog, that had for a day before but little Meat, about 12 ounces of a ſolution of *Indigo* in Fountain water; and after three hours opening the Dog a ſecond time, I obſerved ſeveral of the Lacteals of a *Bluiſh* colour; which upon ſtretching of the Meſentery, did ſeveral times diſappear; but was moſt eaſily diſcern'd when the Meſentery lay looſe; an Argument that the *Bluiſh* colour, was not properly of the Veſſel; but of the Liquor contained in it.

A few days after this, repeating the Experiment in another Company, with the ſolution of *Stone Blue* in Fountain water, and on a Dog that had been kept faſting 36 hours; I ſaw ſeveral of the Lacteals become of a *perfect Blue colour*, within very few Minutes after the Injection: For they appear'd ſo, before I could ſow up the Gut.

About the beginning of *March* following, having kept a Spaniel faſting 36 hours, and then Syringing a pint of a deep Decoction of *Stone Blue* with common Water into one of the ſmall Guts; and after three hours, opening the Dog again, I ſaw many of the Lacteals of a *deep Blue Colour*. Several of them were Cut, and afforded a *Blue Liquor*, (ſome of the Decoction,) running forth on the Meſentery. After this I examin'd the *Ductus Thoracicus*, (on which, together with other Veſſels near it, I had, upon my Return, made a Ligature) and ſaw the *Reraptaculum Chyli*, and *that Ductus*, of a *Bluiſh Colour*; not ſo Blue, indeed, as the Lacteals, from the Solution mixing, in and near the *Receptaculum*, with *Lympha*; but much Bluer than the *Ductus* uſes to be, or than the Lymphatics under the Liver (with which I compared it) were.

I truſted not my own Eyes in any one of theſe Experiments; but in each of them had the Company and Aſſiſtance of ſeveral Phyſicians; who all agreed with me, as to the Colouring of the Lacteals.

I ſhould not have inſiſted thus minutely on theſe Experiments, were I not convinc'd they do right to a Learned Man, (whoſe ſucceſs in tinging the Lacteals is undeſervedly queſtioned) and alſo eſtabliſhed a propoſition of extraordinary conſequence, both in the regular and diſturbed Oeconomy. For

The entrance into the Lacteals (which is much the narroweſt part of all the way from the Mouth to the Maſs of Blood) being thus beyond exception, proved

wide

wide enough to admit ſo groſs a Body as *Stone-blue*, we may here in part explain the admiſſion of Liquors, (as of Diuretic waters, *&c.*) into the Veſſels *in prodigious quantities*, in a very little time.

The ſame wideneſs of the *Pylæ Lacteæ*, makes them eaſy to receive (together with proper Vehicles) thoſe greſſer Bodies, which afterwards compoſe the grumoſe part of the Blood, the Cartilages and Bones.

And this open entrance being allow'd, it will no longer ſeem impoſſible, that with our nouriſhment, Eggs or *Animalcula* themſelves, ſhould enter theſe Veſſels, there being no manner of Queſtion, but that of both the one and the other, ſome are much leſs in bulk than the greateſt Particles of Indigo, in the Decoction abovementioned ſeen in the Lacteals.

Add to this the many ſpecies there are of little Inſects, and their great Fertility; ſo many and ſo great, that of the People of the Animal Kingdom, a very ſmall proportion (perhaps not a quarter part) comes within view of the naked Eye; and then, we ſhall be the better able to account, for the great variety, as well as numbers of Inſects, obſerved in the Juices of the Body Animal.

But the chiefeſt uſe of the wideneſs of the Lacteal Orifices, is in deducing from thence the reception of groſs matters (ſuch as are the effects of indigeſtion, *&c.*) which afterwards in the Blood and *Genus Nervoſum*, many times produce moſt ſevere Diſtempers.

Which notion being in ſome degree confirmed by its firſt propoſer (*vide Clariſſ. Liſteri de Fontibus medicatis Angliæ exercitationem alteram, Ed. Lond. pag.* 48.) will, beſt of all, receive farther Illuſtration from the ſame hand. The Foundation he builds on is certainly good and we have reaſon to hope the Superſtructure will be ſuch alſo.

IV. *An*